

Tech Talk
By Mike O'Connor
MG TD and TF Clutch "Fix"

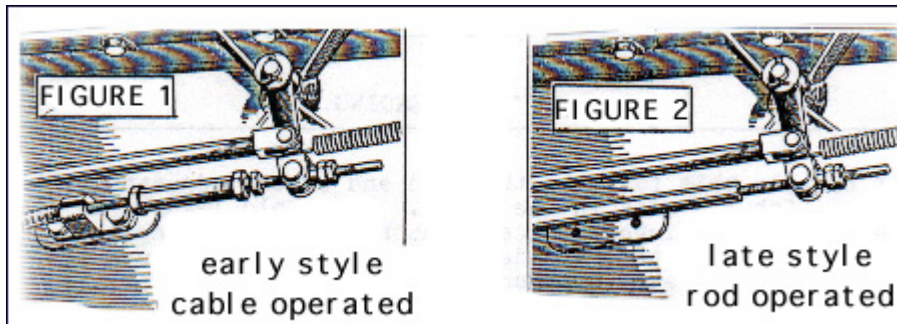
Two Problems are common to the MG TD and TF clutch linkage and both will, at some time, affect every one of these cars.

One is **clutch sensitivity**: difficulty in getting a smooth standing start.

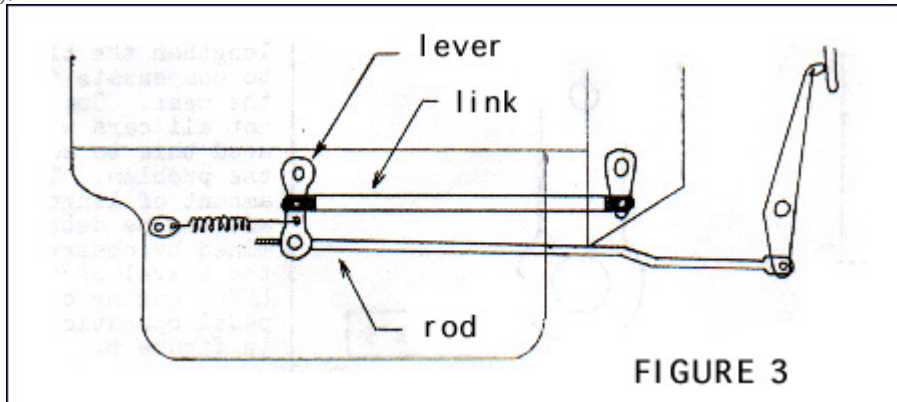
The other is **breakage** of the threaded operating rod where it attaches to the lever on the side of the engine oil pan.

Simple modifications will greatly reduce the clutch sensitivity and eliminate rod breakage.

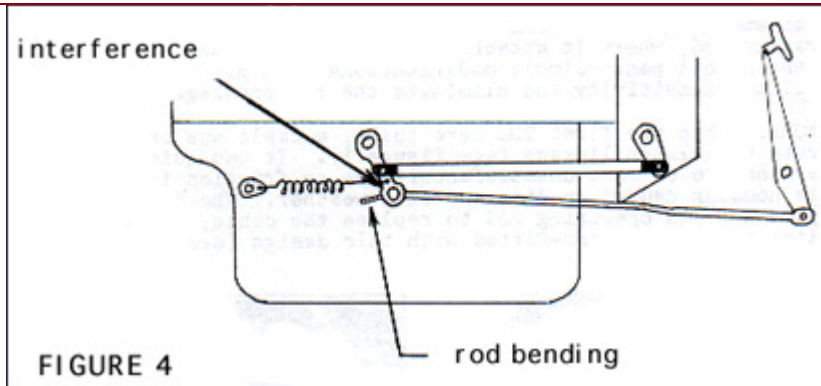
When the first TDs were built, a cable was used to operate the clutch linkage (see figure 1). It was quickly determined to be most unsatisfactory due to friction in the cable housing caused by dirt and cold weather. The factory adopted a rigid operating rod to replace the cable, and most earlier cars were retro-fitted with this design (see figure 2).



First let's cover the breakage/binding of the linkage. It's caused by two details the factory got wrong in the design (see figure 3).

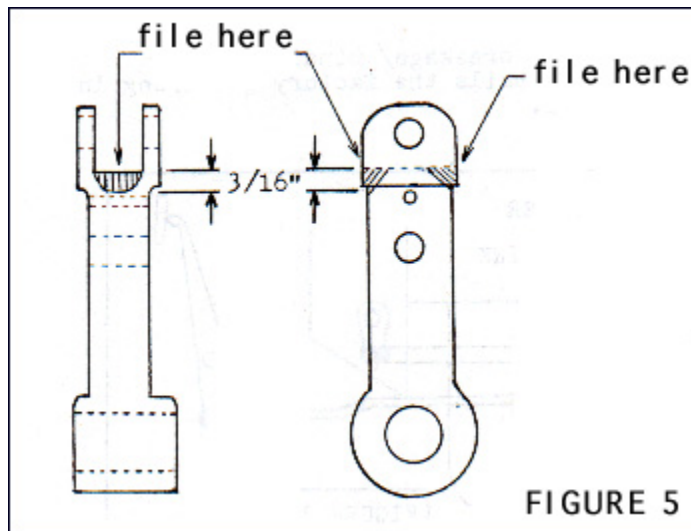


The first problem is the length of the clutch link. It should have been made adjustable but was not. As normal wear occurs, to clutch face, flywheel, throwout bearing and linkage parts, the link must travel further to the rear to release the clutch (see figure 4).



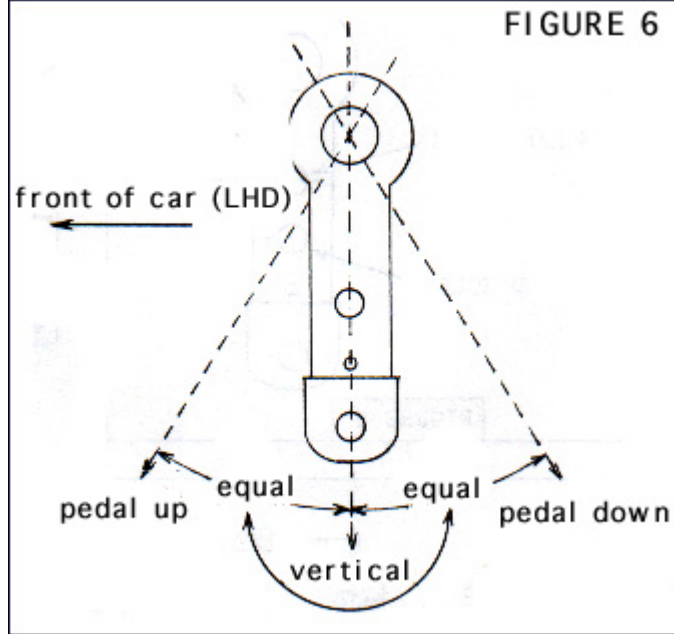
When it travels this far, the threaded end of the adjustable rod interferes with the slot in the lever. Every old lever I've seen shows signs of this interference. The result is bending and eventual breakage of the threaded rod.

Two solutions cure the problem. The simplest, which should be done to every car, is filing a relief inside the slot of the lever to allow more travel without interference (see figure 5).

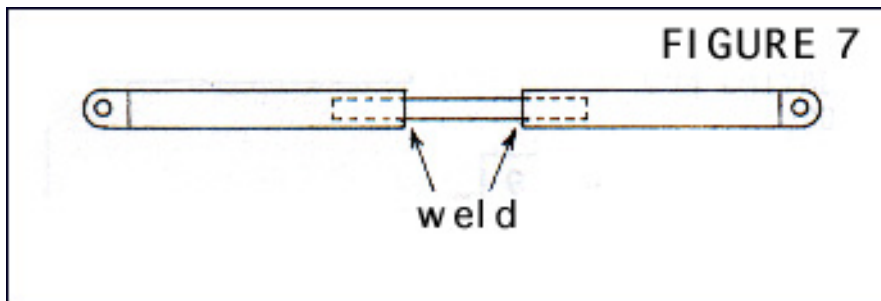


Use a round file to remove material, as shown, from both edges of the lever. This will not weaken it.

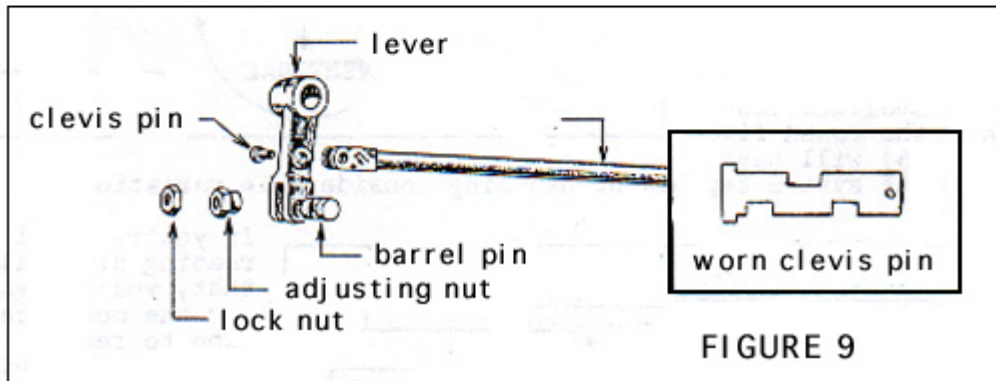
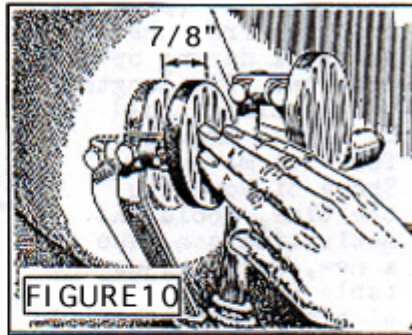
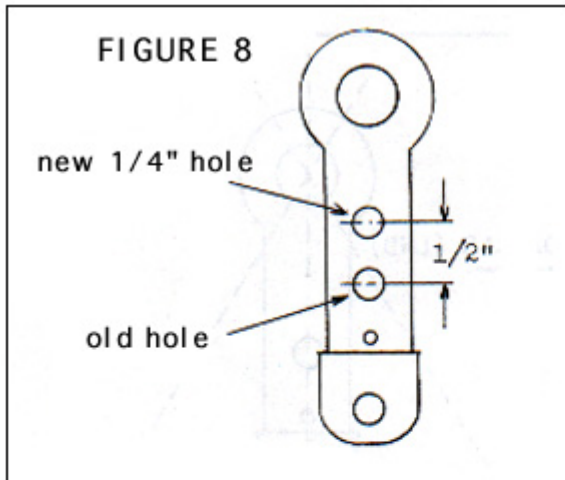
The second solution to this interference problem is to lengthen the link to compensate for the wear. Some cars will need this to solve the problem. The amount of length to add can be determined by observing the travel of the clutch pedal operation (see figure 6).



In the ideal setup, the lever moves an equal amount forward and back from vertical during operation. The length of the link should be set to provide for that movement. Those of you with the time, tools and motivation can make a new, fully adjustable link, but a simple permanent extension can be made using a 3/8 inch rod (see figure 7). A piece of bolt works well. Most cars will want 1/2 to 3/4 inch of link extension. The exact dimension is not critical because your modification with the round file will have made the system capable of handling considerable variation.



If you're still reading after all that, you're ready for the modification to reduce clutch sensitivity, and it's very easy. Mark a spot 1/2 inch above the original link connection hole and drill a new 1/4 inch hole. (see figures 8 and 9).



Don't worry that it's not on a flat area of the lever. Put the parts back on your car, using good new 1/4 inch clevis pins. Be sure to use the proper barrel pin, adjusting nut and locknut as shown.

Readjust the clutch freeplay to approximately 7/8 inch at the pedal, as in figure 10, and take a test drive! The last modification, the hole in the lever, will reduce clutch pedal effort and provide smoother engagement. The effect on some cars is amazing.

- Mike O'Connor